**Use Case Diagram Description：**

The use case diagram displays what a user can basically do with the software. This diagram is drawn based on the requirements gathered and to confirm the requirements with stakeholders.

User can choose to learn different types of sorting algorithm.

**View user guide of the software:**

The user guide will introduce functions of each components of the software, such as buttons and control bars. Description of different modules will be described as well.

**Share information of the software:**

Information such as link to the source code and contact info will be provided for sharing.

**Feedback to developers:**

Developers’ email addresses will be provided.

**Downloading the learning note:**

The note is gathered and edited by developers and can be downloaded as images for learning offline.

**Animation**:

The software provides animation for each sorting algorithm. It will show the sorting process of its corresponding sorting algorithm. Users can adjust the animation to their requirements (Pause, step forward/backwards). Besides, users can modify the component of animation by changing the default input array. Users can choose to set the input array in two ways: select randomly or in decreasing order by the software or set it manually.

**Exercise**:

After learning, users can practice by doing exercises. There are two types of exercise, multiple-choice questions and pseudo-code exercises.

For the pseudo-code exercises, users can deepen their understanding of sorting algorithms by writing their code. To do this, users need to drag the pseudo-code block provided by the software, then splicing the blocks. The software will check whether the blocks are in the correct order and tell users the result.